

# EXTRACTION OIL & GAS

Location: COLORADO Slot: SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)  
Field: WELD COUNTY (NAD83/TRUE NORTH) Well: VARRA #12  
Facility: SEC.05-T06N-R67W Wellbore: VARRA #12 PWB

Plot reference wellpath is VARRA #12 (REV-B.0) PWP

True vertical depths are referenced to SAVANNA 802 (RKB)	Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet
Measured depths are referenced to SAVANNA 802 (RKB)	North Reference: True north
SAVANNA 802 (RKB) to Mean Sea Level: 4889 feet	Scale: True distance
Mean Sea Level to Mud line (At Slot: SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)): 0 feet	Depths are in feet
Coordinates are in feet referenced to Slot	Created by: ingmjamm on 7/31/2015

## Location Information

Facility Name				Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
SEC.05-T06N-R67W				3160186.786	1430380.222	40°30'48.118"N	104°55'25.957"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude	
SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)	-285.99	-1.93	3160186.714	1430094.235	40°30'45.292"N	104°55'25.982"W	
SAVANNA 802 (RKB) to Mud line (At Slot: SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05))						4889ft	
Mean Sea Level to Mud line (At Slot: SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05))						0ft	
SAVANNA 802 (RKB) to Mean Sea Level						4889ft	

## Targets

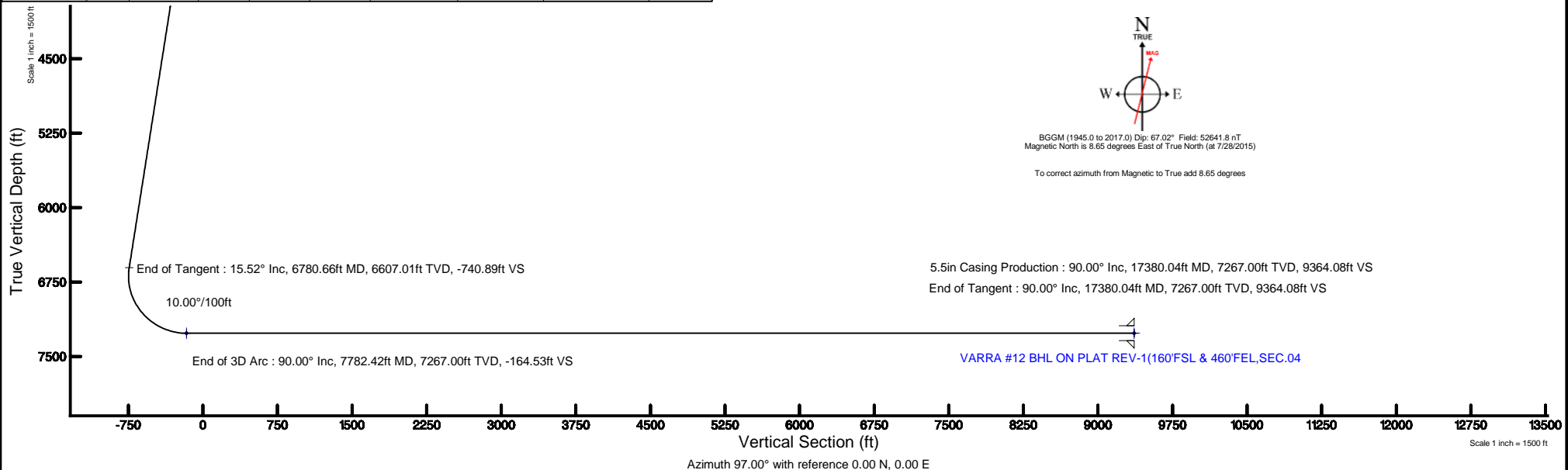
Name	MD (ft)	TVD (ft)	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
VARRA PAD SECTION 04		-9.00	285.95	1.92	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W
VARRA PAD SECTION 05		-9.00	285.95	1.92	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W
VARRA #12 BHL ON PLAT REV-1(160'FSL & 460'FEL,SEC.04)	17380.04	7267.00	-1141.89	9294.19	3169497.81	1429012.79	40°30'33.991"N	104°53'25.656"W
VARRA #12 LANDING POINT	7782.42	7267.00	-1120.32	-303.41	3159890.60	1428972.01	40°30'34.222"N	104°55'29.910"W
VARRA PAD SOUTH 1/4 HARDLINE(460'SETBACKS)		7411.00	285.95	1.92	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W

## Survey Program

Start MD (ft)	End MD (ft)	Tool	Model	Log Name/Comment	Wellbore
15.00	17380.04	NaviTrak	NaviTrak (Standard)		VARRA #12 PWB

## Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	15.00	0.000	221.458	15.00	0.00	0.00	0.00	0.00
End of Tangent	1500.00	0.000	221.458	1500.00	0.00	0.00	0.00	0.00
End of Build	2275.86	15.517	221.458	2266.41	-78.26	-69.13	2.00	-59.08
End of Tangent	6780.66	15.517	221.458	6607.01	-981.45	-867.04	0.00	-740.89
End of 3D Arc	7782.42	90.000	90.129	7267.00	-1120.32	-303.41	10.00	-164.53
End of Tangent	17380.04	90.000	90.129	7267.00	-1141.89	9294.19	0.00	9364.08





# Planned Wellpath Report

VARRA #12 (REV-B.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)
Area	COLORADO	Well	VARRA #12
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #12 PWB
Facility	SEC.05-T06N-R67W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 4.1.1
North Reference	True	User	Ingmjmr
Scale	0.999967	Report Generated	7/31/2015 at 4:25:48 PM
Convergence at slot	0.37° East	Database/Source file	Denver/VARRA_#12_PWB.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	-285.99	-1.93	3160186.71	1430094.24	40°30'45.292"N	104°55'25.982"W
Facility Reference Pt			3160186.79	1430380.22	40°30'48.118"N	104°55'25.957"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	SAVANNA 802 (RKB) to Facility Vertical Datum	4889.00ft
Horizontal Reference Pt	Slot	SAVANNA 802 (RKB) to Mean Sea Level	4889.00ft
Vertical Reference Pt	SAVANNA 802 (RKB)	SAVANNA 802 (RKB) to Mud Line at Slot (SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05))	4889.00ft
MD Reference Pt	SAVANNA 802 (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	97.00°



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VARRA #12 (REV-B.0) PWP

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Facility	SEC.05-T06N-R67W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
0.00†	0.000	221.458	0.00	0.00	0.00	0.00	0.00	
15.00	0.000	221.458	15.00	0.00	0.00	0.00	0.00	Tie On
115.00†	0.000	221.458	115.00	0.00	0.00	0.00	0.00	
215.00†	0.000	221.458	215.00	0.00	0.00	0.00	0.00	
315.00†	0.000	221.458	315.00	0.00	0.00	0.00	0.00	
415.00†	0.000	221.458	415.00	0.00	0.00	0.00	0.00	
515.00†	0.000	221.458	515.00	0.00	0.00	0.00	0.00	
615.00†	0.000	221.458	615.00	0.00	0.00	0.00	0.00	
715.00†	0.000	221.458	715.00	0.00	0.00	0.00	0.00	
815.00†	0.000	221.458	815.00	0.00	0.00	0.00	0.00	
915.00†	0.000	221.458	915.00	0.00	0.00	0.00	0.00	
1015.00†	0.000	221.458	1015.00	0.00	0.00	0.00	0.00	
1115.00†	0.000	221.458	1115.00	0.00	0.00	0.00	0.00	
1215.00†	0.000	221.458	1215.00	0.00	0.00	0.00	0.00	
1315.00†	0.000	221.458	1315.00	0.00	0.00	0.00	0.00	
1415.00†	0.000	221.458	1415.00	0.00	0.00	0.00	0.00	
1500.00	0.000	221.458	1500.00	0.00	0.00	0.00	0.00	End of Tangent
1515.00†	0.300	221.458	1515.00	-0.02	-0.03	-0.03	2.00	
1615.00†	2.300	221.458	1614.97	-1.31	-1.73	-1.53	2.00	
1715.00†	4.300	221.458	1714.80	-4.56	-6.04	-5.34	2.00	
1815.00†	6.300	221.458	1814.37	-9.79	-12.97	-11.45	2.00	
1915.00†	8.300	221.458	1913.55	-16.98	-22.49	-19.87	2.00	
2015.00†	10.300	221.458	2012.23	-26.12	-34.60	-30.57	2.00	
2115.00†	12.300	221.458	2110.29	-37.20	-49.28	-43.54	2.00	
2215.00†	14.300	221.458	2207.60	-50.22	-66.52	-58.77	2.00	
2275.86	15.517	221.458	2266.41	-59.08	-78.26	-69.13	2.00	End of Build
2315.00†	15.517	221.458	2304.12	-65.00	-86.10	-76.07	0.00	
2415.00†	15.517	221.458	2400.48	-80.13	-106.15	-93.78	0.00	
2515.00†	15.517	221.458	2496.83	-95.27	-126.20	-111.49	0.00	
2615.00†	15.517	221.458	2593.19	-110.41	-146.25	-129.20	0.00	



# Planned Wellpath Report

VARRA #12 (REV-B.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)
Area	COLORADO	Well	VARRA #12
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #12 PWB
Facility	SEC.05-T06N-R67W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
2715.00†	15.517	221.458	2689.54	-125.54	-166.30	-146.92	0.00	
2815.00†	15.517	221.458	2785.90	-140.68	-186.35	-164.63	0.00	
2915.00†	15.517	221.458	2882.25	-155.81	-206.40	-182.34	0.00	
3015.00†	15.517	221.458	2978.61	-170.95	-226.45	-200.05	0.00	
3115.00†	15.517	221.458	3074.96	-186.08	-246.50	-217.77	0.00	
3215.00†	15.517	221.458	3171.32	-201.22	-266.55	-235.48	0.00	
3315.00†	15.517	221.458	3267.67	-216.35	-286.60	-253.19	0.00	
3415.00†	15.517	221.458	3364.03	-231.49	-306.65	-270.90	0.00	
3515.00†	15.517	221.458	3460.38	-246.62	-326.70	-288.62	0.00	
3615.00†	15.517	221.458	3556.74	-261.76	-346.75	-306.33	0.00	
3715.00†	15.517	221.458	3653.09	-276.89	-366.80	-324.04	0.00	
3815.00†	15.517	221.458	3749.45	-292.03	-386.85	-341.75	0.00	
3915.00†	15.517	221.458	3845.80	-307.16	-406.90	-359.46	0.00	
4015.00†	15.517	221.458	3942.16	-322.30	-426.95	-377.18	0.00	
4115.00†	15.517	221.458	4038.51	-337.43	-447.00	-394.89	0.00	
4215.00†	15.517	221.458	4134.87	-352.57	-467.05	-412.60	0.00	
4315.00†	15.517	221.458	4231.22	-367.70	-487.10	-430.31	0.00	
4415.00†	15.517	221.458	4327.58	-382.84	-507.15	-448.03	0.00	
4515.00†	15.517	221.458	4423.93	-397.98	-527.19	-465.74	0.00	
4615.00†	15.517	221.458	4520.29	-413.11	-547.24	-483.45	0.00	
4715.00†	15.517	221.458	4616.64	-428.25	-567.29	-501.16	0.00	
4815.00†	15.517	221.458	4713.00	-443.38	-587.34	-518.88	0.00	
4915.00†	15.517	221.458	4809.35	-458.52	-607.39	-536.59	0.00	
5015.00†	15.517	221.458	4905.71	-473.65	-627.44	-554.30	0.00	
5115.00†	15.517	221.458	5002.06	-488.79	-647.49	-572.01	0.00	
5215.00†	15.517	221.458	5098.42	-503.92	-667.54	-589.73	0.00	
5315.00†	15.517	221.458	5194.77	-519.06	-687.59	-607.44	0.00	
5415.00†	15.517	221.458	5291.13	-534.19	-707.64	-625.15	0.00	
5515.00†	15.517	221.458	5387.48	-549.33	-727.69	-642.86	0.00	
5615.00†	15.517	221.458	5483.84	-564.46	-747.74	-660.57	0.00	



# Planned Wellpath Report

VARRA #12 (REV-B.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)
Area	COLORADO	Well	VARRA #12
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #12 PWB
Facility	SEC.05-T06N-R67W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
5715.00†	15.517	221.458	5580.19	-579.60	-767.79	-678.29	0.00	
5815.00†	15.517	221.458	5676.55	-594.73	-787.84	-696.00	0.00	
5915.00†	15.517	221.458	5772.90	-609.87	-807.89	-713.71	0.00	
6015.00†	15.517	221.458	5869.26	-625.00	-827.94	-731.42	0.00	
6115.00†	15.517	221.458	5965.61	-640.14	-847.99	-749.14	0.00	
6215.00†	15.517	221.458	6061.97	-655.27	-868.04	-766.85	0.00	
6315.00†	15.517	221.458	6158.32	-670.41	-888.09	-784.56	0.00	
6415.00†	15.517	221.458	6254.68	-685.54	-908.14	-802.27	0.00	
6515.00†	15.517	221.458	6351.03	-700.68	-928.19	-819.99	0.00	
6615.00†	15.517	221.458	6447.39	-715.82	-948.24	-837.70	0.00	
6715.00†	15.517	221.458	6543.74	-730.95	-968.29	-855.41	0.00	
6780.66	15.517	221.458	6607.01	-740.89	-981.45	-867.04	0.00	End of Tangent
6815.00†	13.546	210.207	6640.26	-745.07	-988.37	-872.11	10.00	
6915.00†	12.213	164.544	6737.98	-745.65	-1008.74	-875.19	10.00	
7015.00†	17.663	131.029	6834.74	-728.99	-1028.94	-860.89	10.00	
7115.00†	25.921	115.531	6927.59	-695.61	-1048.37	-829.64	10.00	
7215.00†	35.055	107.416	7013.71	-646.51	-1066.43	-782.40	10.00	
7315.00†	44.525	102.367	7090.48	-583.20	-1082.58	-720.59	10.00	
7415.00†	54.153	98.792	7155.57	-507.59	-1096.32	-646.10	10.00	
7515.00†	63.864	96.000	7207.01	-421.98	-1107.23	-561.19	10.00	
7615.00†	73.621	93.642	7243.23	-328.98	-1114.99	-468.44	10.00	
7715.00†	83.401	91.511	7263.12	-231.40	-1119.36	-370.67	10.00	
7782.42	90.000	90.129	7267.00 <sup>1</sup>	-164.53	-1120.32	-303.41	10.00	End of 3D Arc
7815.00†	90.000	90.129	7267.00	-132.18	-1120.39	-270.82	0.00	
7915.00†	90.000	90.129	7267.00	-32.90	-1120.62	-170.82	0.00	
8015.00†	90.000	90.129	7267.00	66.38	-1120.84	-70.82	0.00	
8115.00†	90.000	90.129	7267.00	165.66	-1121.07	29.18	0.00	
8215.00†	90.000	90.129	7267.00	264.95	-1121.29	129.18	0.00	
8315.00†	90.000	90.129	7267.00	364.23	-1121.52	229.18	0.00	
8415.00†	90.000	90.129	7267.00	463.51	-1121.74	329.18	0.00	



# Planned Wellpath Report

VARRA #12 (REV-B.0) PWP

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Area	COLORADO	Well	VARRA #12
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #12 PWB
Facility	SEC.05-T06N-R67W		

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MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
8515.00†	90.000	90.129	7267.00	562.79	-1121.97	429.18	0.00	
8615.00†	90.000	90.129	7267.00	662.07	-1122.19	529.17	0.00	
8715.00†	90.000	90.129	7267.00	761.35	-1122.42	629.17	0.00	
8815.00†	90.000	90.129	7267.00	860.63	-1122.64	729.17	0.00	
8915.00†	90.000	90.129	7267.00	959.91	-1122.86	829.17	0.00	
9015.00†	90.000	90.129	7267.00	1059.19	-1123.09	929.17	0.00	
9115.00†	90.000	90.129	7267.00	1158.47	-1123.31	1029.17	0.00	
9215.00†	90.000	90.129	7267.00	1257.75	-1123.54	1129.17	0.00	
9315.00†	90.000	90.129	7267.00	1357.04	-1123.76	1229.17	0.00	
9415.00†	90.000	90.129	7267.00	1456.32	-1123.99	1329.17	0.00	
9515.00†	90.000	90.129	7267.00	1555.60	-1124.21	1429.17	0.00	
9615.00†	90.000	90.129	7267.00	1654.88	-1124.44	1529.17	0.00	
9715.00†	90.000	90.129	7267.00	1754.16	-1124.66	1629.17	0.00	
9815.00†	90.000	90.129	7267.00	1853.44	-1124.89	1729.17	0.00	
9915.00†	90.000	90.129	7267.00	1952.72	-1125.11	1829.17	0.00	
10015.00†	90.000	90.129	7267.00	2052.00	-1125.34	1929.17	0.00	
10115.00†	90.000	90.129	7267.00	2151.28	-1125.56	2029.17	0.00	
10215.00†	90.000	90.129	7267.00	2250.56	-1125.79	2129.17	0.00	
10315.00†	90.000	90.129	7267.00	2349.84	-1126.01	2229.17	0.00	
10415.00†	90.000	90.129	7267.00	2449.12	-1126.24	2329.17	0.00	
10515.00†	90.000	90.129	7267.00	2548.41	-1126.46	2429.17	0.00	
10615.00†	90.000	90.129	7267.00	2647.69	-1126.68	2529.17	0.00	
10715.00†	90.000	90.129	7267.00	2746.97	-1126.91	2629.17	0.00	
10815.00†	90.000	90.129	7267.00	2846.25	-1127.13	2729.17	0.00	
10915.00†	90.000	90.129	7267.00	2945.53	-1127.36	2829.17	0.00	
11015.00†	90.000	90.129	7267.00	3044.81	-1127.58	2929.17	0.00	
11115.00†	90.000	90.129	7267.00	3144.09	-1127.81	3029.17	0.00	
11215.00†	90.000	90.129	7267.00	3243.37	-1128.03	3129.17	0.00	
11315.00†	90.000	90.129	7267.00	3342.65	-1128.26	3229.17	0.00	
11415.00†	90.000	90.129	7267.00	3441.93	-1128.48	3329.17	0.00	



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Facility	SEC.05-T06N-R67W		

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11515.00†	90.000	90.129	7267.00	3541.21	-1128.71	3429.17	0.00	
11615.00†	90.000	90.129	7267.00	3640.50	-1128.93	3529.17	0.00	
11715.00†	90.000	90.129	7267.00	3739.78	-1129.16	3629.17	0.00	
11815.00†	90.000	90.129	7267.00	3839.06	-1129.38	3729.17	0.00	
11915.00†	90.000	90.129	7267.00	3938.34	-1129.61	3829.17	0.00	
12015.00†	90.000	90.129	7267.00	4037.62	-1129.83	3929.17	0.00	
12115.00†	90.000	90.129	7267.00	4136.90	-1130.06	4029.17	0.00	
12215.00†	90.000	90.129	7267.00	4236.18	-1130.28	4129.17	0.00	
12315.00†	90.000	90.129	7267.00	4335.46	-1130.50	4229.17	0.00	
12415.00†	90.000	90.129	7267.00	4434.74	-1130.73	4329.17	0.00	
12515.00†	90.000	90.129	7267.00	4534.02	-1130.95	4429.17	0.00	
12615.00†	90.000	90.129	7267.00	4633.30	-1131.18	4529.16	0.00	
12715.00†	90.000	90.129	7267.00	4732.58	-1131.40	4629.16	0.00	
12815.00†	90.000	90.129	7267.00	4831.87	-1131.63	4729.16	0.00	
12915.00†	90.000	90.129	7267.00	4931.15	-1131.85	4829.16	0.00	
13015.00†	90.000	90.129	7267.00	5030.43	-1132.08	4929.16	0.00	
13115.00†	90.000	90.129	7267.00	5129.71	-1132.30	5029.16	0.00	
13215.00†	90.000	90.129	7267.00	5228.99	-1132.53	5129.16	0.00	
13315.00†	90.000	90.129	7267.00	5328.27	-1132.75	5229.16	0.00	
13415.00†	90.000	90.129	7267.00	5427.55	-1132.98	5329.16	0.00	
13515.00†	90.000	90.129	7267.00	5526.83	-1133.20	5429.16	0.00	
13615.00†	90.000	90.129	7267.00	5626.11	-1133.43	5529.16	0.00	
13715.00†	90.000	90.129	7267.00	5725.39	-1133.65	5629.16	0.00	
13815.00†	90.000	90.129	7267.00	5824.67	-1133.88	5729.16	0.00	
13915.00†	90.000	90.129	7267.00	5923.95	-1134.10	5829.16	0.00	
14015.00†	90.000	90.129	7267.00	6023.24	-1134.32	5929.16	0.00	
14115.00†	90.000	90.129	7267.00	6122.52	-1134.55	6029.16	0.00	
14215.00†	90.000	90.129	7267.00	6221.80	-1134.77	6129.16	0.00	
14315.00†	90.000	90.129	7267.00	6321.08	-1135.00	6229.16	0.00	
14415.00†	90.000	90.129	7267.00	6420.36	-1135.22	6329.16	0.00	





# Planned Wellpath Report

VARRA #12 (REV-B.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)
Area	COLORADO	Well	VARRA #12
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #12 PWB
Facility	SEC.05-T06N-R67W		

## WELLPATH DATA (180 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	DLS [°/100ft]	Comments
14515.00†	90.000	90.129	7267.00	6519.64	-1135.45	6429.16	0.00	
14615.00†	90.000	90.129	7267.00	6618.92	-1135.67	6529.16	0.00	
14715.00†	90.000	90.129	7267.00	6718.20	-1135.90	6629.16	0.00	
14815.00†	90.000	90.129	7267.00	6817.48	-1136.12	6729.16	0.00	
14915.00†	90.000	90.129	7267.00	6916.76	-1136.35	6829.16	0.00	
15015.00†	90.000	90.129	7267.00	7016.04	-1136.57	6929.16	0.00	
15115.00†	90.000	90.129	7267.00	7115.33	-1136.80	7029.16	0.00	
15215.00†	90.000	90.129	7267.00	7214.61	-1137.02	7129.16	0.00	
15315.00†	90.000	90.129	7267.00	7313.89	-1137.25	7229.16	0.00	
15415.00†	90.000	90.129	7267.00	7413.17	-1137.47	7329.16	0.00	
15515.00†	90.000	90.129	7267.00	7512.45	-1137.70	7429.16	0.00	
15615.00†	90.000	90.129	7267.00	7611.73	-1137.92	7529.16	0.00	
15715.00†	90.000	90.129	7267.00	7711.01	-1138.14	7629.16	0.00	
15815.00†	90.000	90.129	7267.00	7810.29	-1138.37	7729.16	0.00	
15915.00†	90.000	90.129	7267.00	7909.57	-1138.59	7829.16	0.00	
16015.00†	90.000	90.129	7267.00	8008.85	-1138.82	7929.16	0.00	
16115.00†	90.000	90.129	7267.00	8108.13	-1139.04	8029.16	0.00	
16215.00†	90.000	90.129	7267.00	8207.41	-1139.27	8129.16	0.00	
16315.00†	90.000	90.129	7267.00	8306.70	-1139.49	8229.16	0.00	
16415.00†	90.000	90.129	7267.00	8405.98	-1139.72	8329.16	0.00	
16515.00†	90.000	90.129	7267.00	8505.26	-1139.94	8429.15	0.00	
16615.00†	90.000	90.129	7267.00	8604.54	-1140.17	8529.15	0.00	
16715.00†	90.000	90.129	7267.00	8703.82	-1140.39	8629.15	0.00	
16815.00†	90.000	90.129	7267.00	8803.10	-1140.62	8729.15	0.00	
16915.00†	90.000	90.129	7267.00	8902.38	-1140.84	8829.15	0.00	
17015.00†	90.000	90.129	7267.00	9001.66	-1141.07	8929.15	0.00	
17115.00†	90.000	90.129	7267.00	9100.94	-1141.29	9029.15	0.00	
17215.00†	90.000	90.129	7267.00	9200.22	-1141.52	9129.15	0.00	
17315.00†	90.000	90.129	7267.00	9299.50	-1141.74	9229.15	0.00	
17380.04	90.000	90.129	7267.00 <sup>2</sup>	9364.08	-1141.89	9294.19	0.00	End of Tangent

## HOLE & CASING SECTIONS - Ref Wellbore: VARRA #12 PWB Ref Wellpath: VARRA #12 (REV-B.0) PWP

String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
7.875in Open Hole	1500.00	17380.04	15880.04	1500.00	7267.00	0.00	0.00	-1141.89	9294.19
5.5in Casing Production	15.00	17380.04	17365.04	15.00	7267.00	0.00	0.00	-1141.89	9294.19

## TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
VARRA PAD SECTION 04		-9.00	285.95	1.92	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W	polygon
VARRA PAD SECTION 05		-9.00	285.95	1.92	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W	polygon
2) VARRA #12 BHL ON PLAT	17380.04	7267.00	-1141.89	9294.19	3169487.81	1429012.79	40°30'33.991"N	104°53'25.656"W	point



REV-1(160'FSL & 460'FEL,SEC.04										
1) VARRA #12 LANDING POINT	7782.42	7267.00	-1120.32	-303.41	3159890.60	1428972.01	40°30'34.222"N	104°55'29.910"W	point	
VARRA PAD SOUTH 1/4 HARDLINES(460'SETBACKS)		7411.00	285.95	1.92	3160186.77	1430380.18	40°30'48.118"N	104°55'25.957"W	polygon	

SURVEY PROGRAM - Ref Wellbore: VARRA #12 PWB						Ref Wellpath: VARRA #12 (REV-B.0) PWP				
Start MD [ft]	End MD [ft]	Positional Uncertainty Model			Log Name/Comment			Wellbore		
15.00	17380.04	NaviTrak (Standard)						VARRA #12 PWB		



# Planned Wellpath Report

VARRA #12 (REV-B.0) PWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#12 VARRA #12(1459'FSL & 784'FWL,SEC.05)
Area	COLORADO	Well	VARRA #12
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	VARRA #12 PWB
Facility	SEC.05-T06N-R67W		

## DESIGN COMMENTS

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
15.00	0.000	221.458	15.00	Tie On
1500.00	0.000	221.458	1500.00	End of Tangent
2275.86	15.517	221.458	2266.41	End of Build
6780.66	15.517	221.458	6607.01	End of Tangent
7782.42	90.000	90.129	7267.00	End of 3D Arc
17380.04	90.000	90.129	7267.00	End of Tangent